

CHAPTER 3

THE FULCRUM

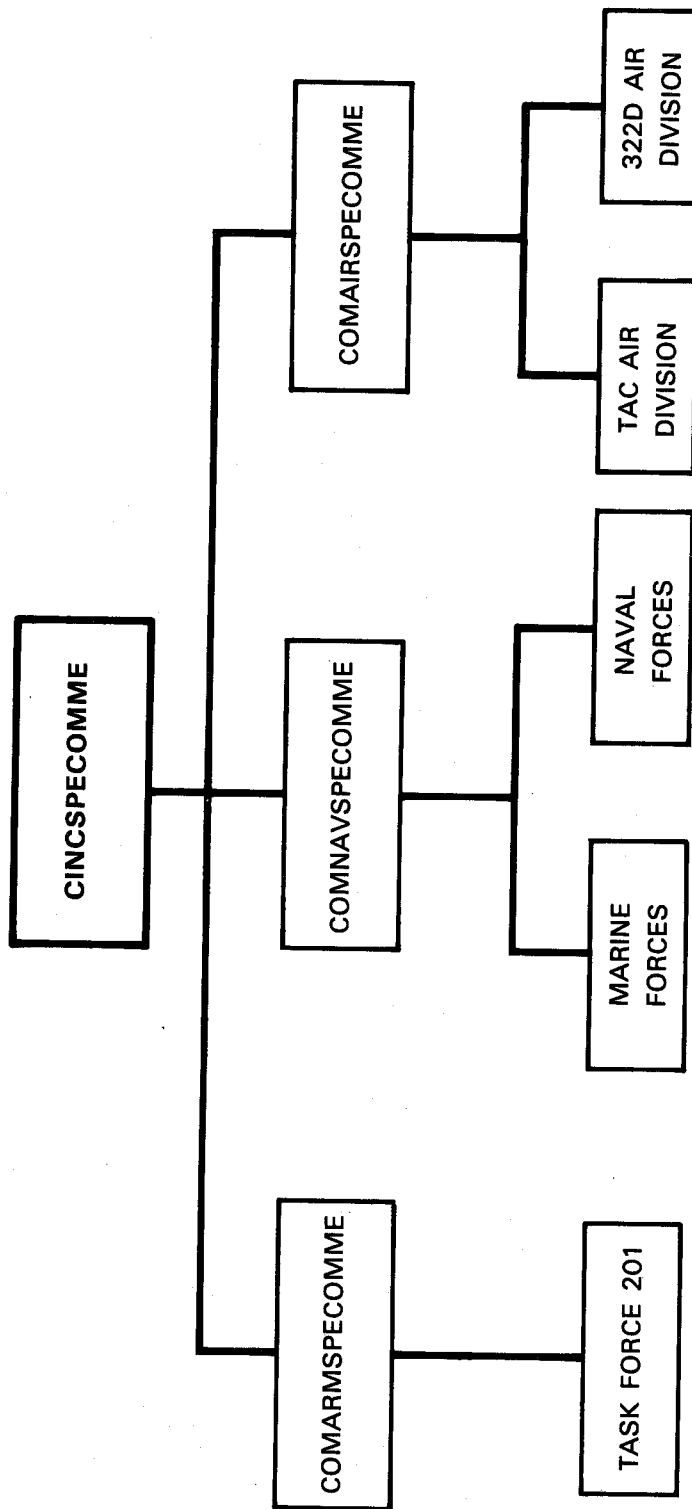
A fulcrum is the support on which a lever turns, and combat service support was the fulcrum of rapid deployment logistics for ATF 201. Combat service support propped up this logistical lever sustaining the force by providing resupply and services.

These services are difficult to discuss as a single issue because of the specific nature of each. But these somewhat interdependent services were organized in a single logistical command. Their combat service support functions need to be examined, and the following separate, but related, sections describe certain ones. The chapter begins with a discussion of the organizational process that orients the service support mission. Following sections then discuss resupply; procurement; civil affairs; medical support; and, finally, security, a common problem of all service support units.

Organization

Because the Lebanese operation was a unilateral action, the JCS directive executing the U.S. portion of Bluebat (CINCAMBRITFOR OPLAN 1-58) substituted U.S. forces for British units. This action resulted in the creation of two sizable provisional organizations--one Marine, one Army--each commanded by a brigadier general.¹ CINCSPCOMME OPLAN 215-58 had no provisions for a joint ground force command, although both the respective Army and Marine planners understood that their forces could be employed under five of the eight courses of action discussed in the plan. The three remaining courses of action involved combined operations with the British. Probably because of a lack of guidance, the USAREUR planners of EP 201 established the organization shown in figure 8. The commander of the service with the most forces would act as the senior overall commander.²

The two ground force commanders reported to different higher headquarters: the Army to Commander, U.S. Army Forces, SPECOMME, and the Marines to Commander, U.S. Naval Forces, SPECOMME. Therefore, it was unclear who commanded the ground forces, and participants quickly realized that these units would have to coordinate their activities.³



Source: "Infantry Conference Report," Comments, 211.

Figure 8. Organization for Operations

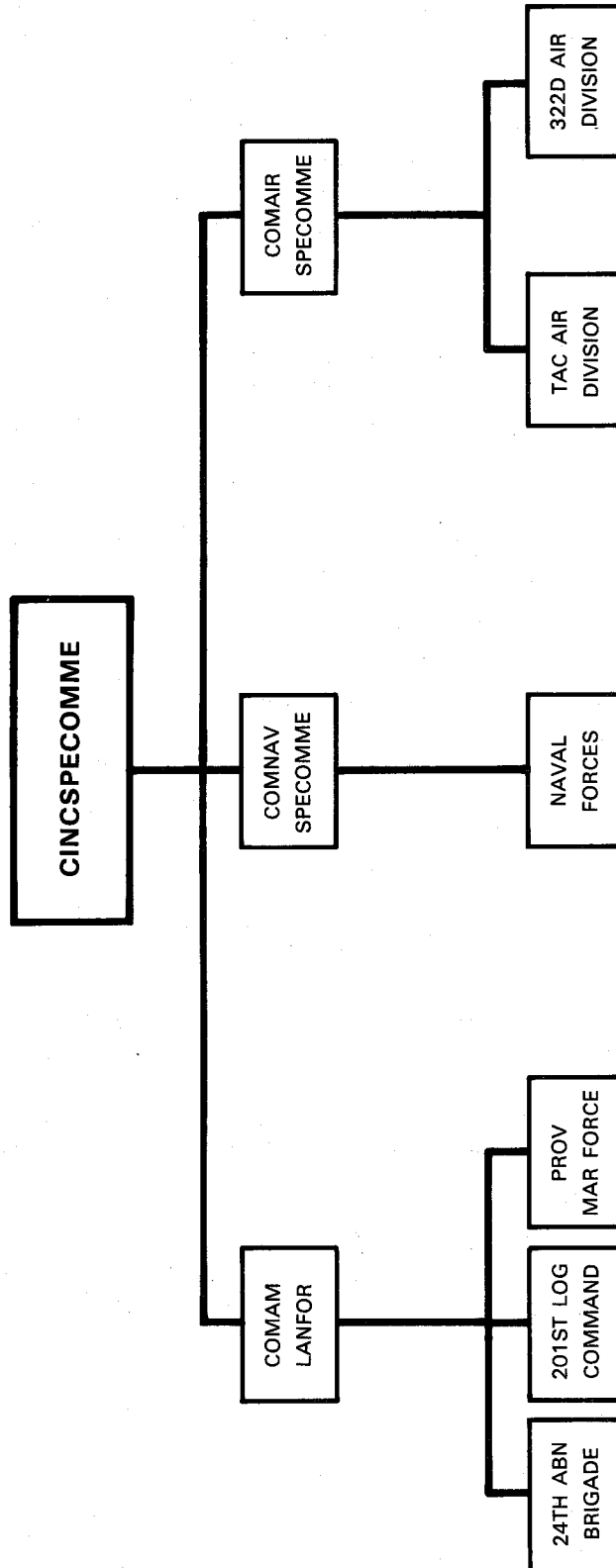
General Gray recalled that coordination between the Army and Marine Corps was good and that they accomplished their missions. The noncombat situation, however, provided the breathing space to establish a unified ground command. As General Gray described it: "More and more of my time was being spent coordinating with CINCSPECOMME, General Wade (the Marine ground commander), Admiral Yeager (Naval commander), Ambassador McClintock and the Lebanese. It was becoming apparent to me that most of that coordination could better be done at a higher level than my own."⁴

CINCSPECOMME recognized the accuracy of Gray's observation and created another headquarters, one for which planners had not foreseen a need.

CINCSPECOMME considered three solutions to increase coordination between the services. First, the senior brigadier general would become Commander, American Land Forces (COMAMLANFOR); second, CINCSPECOMME would coordinate the ground operations; and, third, a separate senior ground force commander would be appointed by the president.⁵ CINCSPECOMME rejected the first course of action because both commanders were fully occupied commanding their own organizations and subsequent operations might have required the geographic separation of the two forces, further complicating command and control. CINCSPECOMME considered direct coordination inadvisable because such action would have made him, in effect, one of his own component commanders. Therefore, the establishment of a separate senior ground force command was the only realistic solution.⁶ (See figure 9.)

On 21 July, CINCSPECOMME requested the Chief of Naval Operations, as executive agent for the President, to assign an Army or Marine major general or lieutenant general as COMAMLANFOR. On 23 July, DA, as directed by the JCS, designated Maj. Gen. Paul D. Adams for this assignment. As early as 15 July, General Adams had commented to General Gray that he might be sent to Lebanon to take command of all land forces.⁷ Thus, Adams had about a week to prepare for his new assignment. But he stated later, "I was a little surprised that I didn't have any kind of definitive orders. . . ."⁸ General Gray, however, endorsed the decision:

We probably would have muddled through without the new command structure but might well have made some mistakes that need not have been made. General Adams gave firm direction to the entire operation and played a pivotal part in the many



Source: "Infantry Conference Report," Comments, 226.

Figure 9. Organization for Operations (Final)

actions which were never publicized but which eventually nudged the Lebanese into burying their firearms for awhile and allowing the US to retract its forces.⁹

General Adams's first priority was to translate the broad mission directive into an operational mission statement. The overall goal was twofold: protect American lives and interests in Lebanon and sustain the independence of Lebanon. Adams identified the following specific tasks required to accomplish his mission:

- Maintain security around selected points such as the U.S. embassy, the Lebanese presidential palace, and the U.S. military base at the Beirut International Airport.

- Keep all principal routes of communications in and around Beirut and to the international airport and port area open and secure by frequent patrolling and by placing strongpoints along the routes.

- Secure Beirut from rebel invasion.

- Order frequent aerial reconnaissance missions over Lebanon and detailed aerial surveillance of routes leading into Beirut and routes leading from the Syrian border.

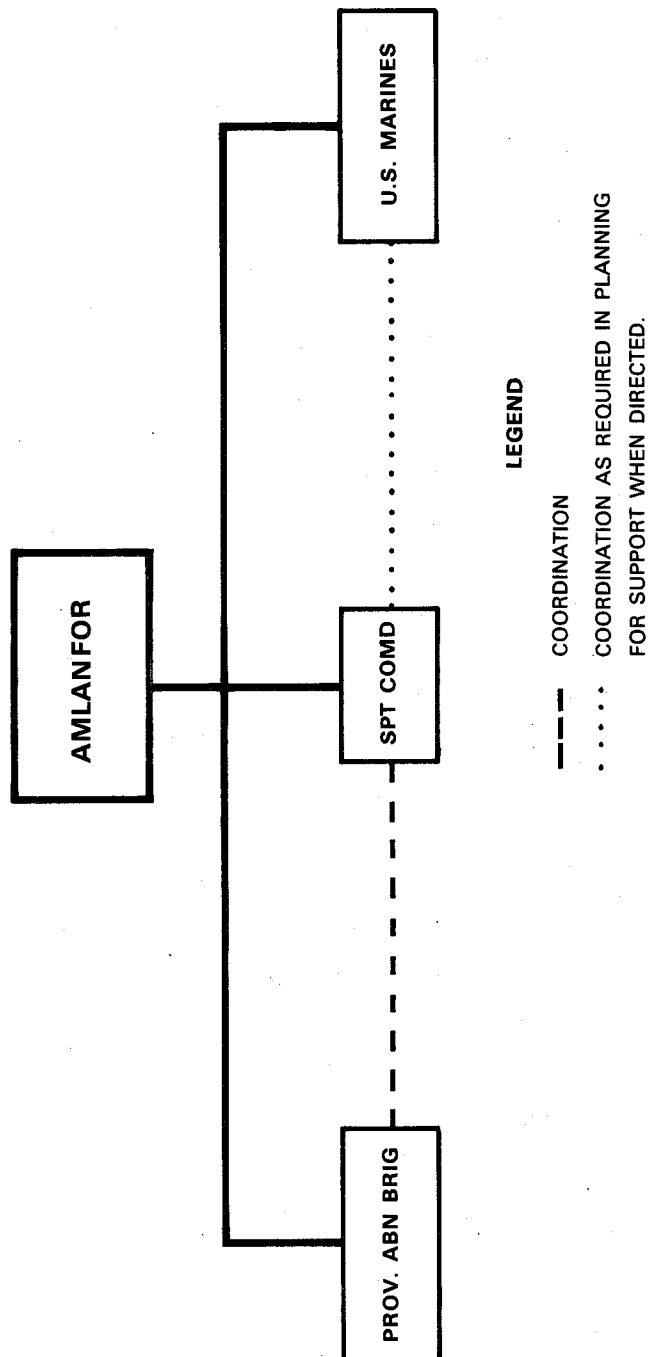
- Maintain a general reserve composed of two echelons: an immediate reserve of one airborne company and one tank company on the edge of Beirut along the airport road and a follow-on reserve of battalion strength supported by artillery and tanks.¹⁰

To accomplish these tasks, General Adams organized his forces as depicted in figure 10. The combat forces, the airborne brigade and the Marines, divided the specific ground tasks. Adams placed the 201st Logistical Command on an equal footing with the combat commands it supported.

Based on General Adams's guidance, Colonel Meetze determined that his mission was "to exercise command of the Army Supply and Service troops, ATF 201; to provide logistical support of all army troops in Lebanon; and to accomplish other missions that may be directed by CG, American Land Forces."¹¹ Specifically, the support command was to:

- Exercise command over all logistical troops assigned to ATF 201.

- Plan and conduct support operations with Army support forces assigned.



Source: 201st LC, "Report," including "Letter of Instruction," 30 July 1958.

Figure 10. Land Force Organization

- Conduct liaison with local Lebanese Army elements through the commanding general of the U.S. airborne brigade (all other liaison was required to go through AMLANFOR headquarters).

- Achieve a full support capability as rapidly as possible and provide local security of support installations and activities in coordination with the airborne brigade.

- Plan and conduct training of support personnel as necessary for operational support requirements.

- Receive and quarter incoming technical and administrative troops and coordinate security with the airborne brigade.¹²

Furthermore, Colonel Meetze subdivided these logistical missions into fifteen discrete functions:

- Procure, receive, store, maintain, and distribute supplies and equipment.

- Manage transportation service.

- Operate facilities for essential military operations, especially for the maintenance and repair of equipment, roads, railroads, and buildings.

- Provide medical care, including evacuation and hospitalization of the sick and wounded.

- Train troop units and individuals assigned or attached to the 201st Logistical Command.

- Control traffic within the assigned area.

- Procure necessary real estate.

- Provide rest camps, leave facilities, and welfare and recreational programs and facilities.

- Provide chaplain service.

- Operate the Army exchange service.

- Operate the Army postal service.

- Handle legal claims and judicial services.

- Handle finance and accounting services.

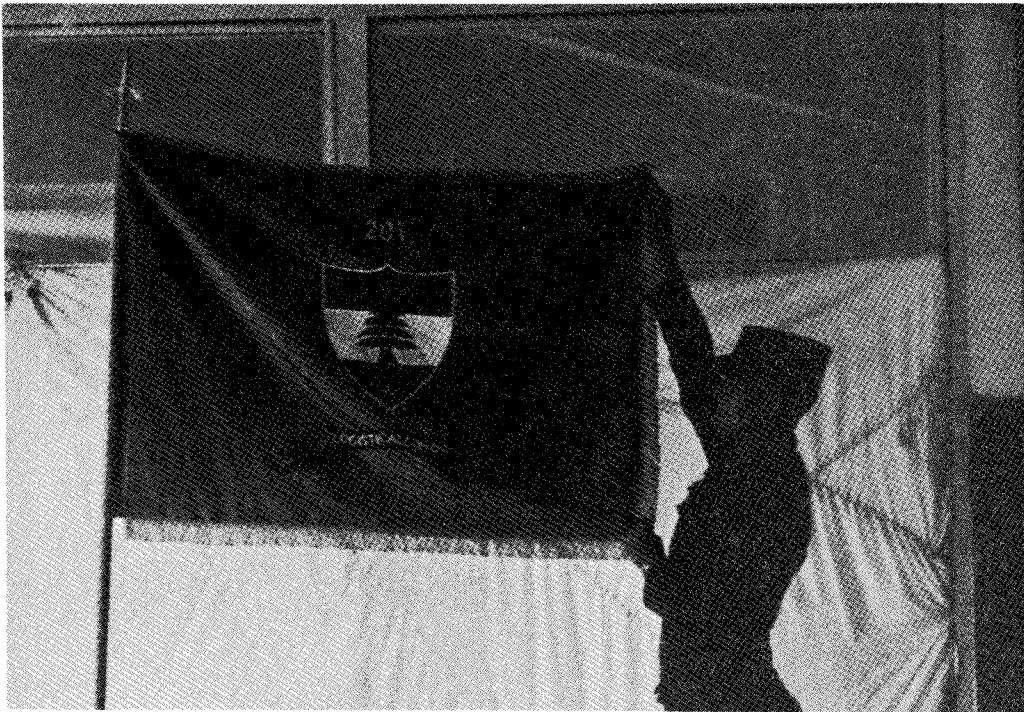
- Provide rear area defense and area damage control within the 201st Logistical Command area.

- Conduct civil affairs.¹³

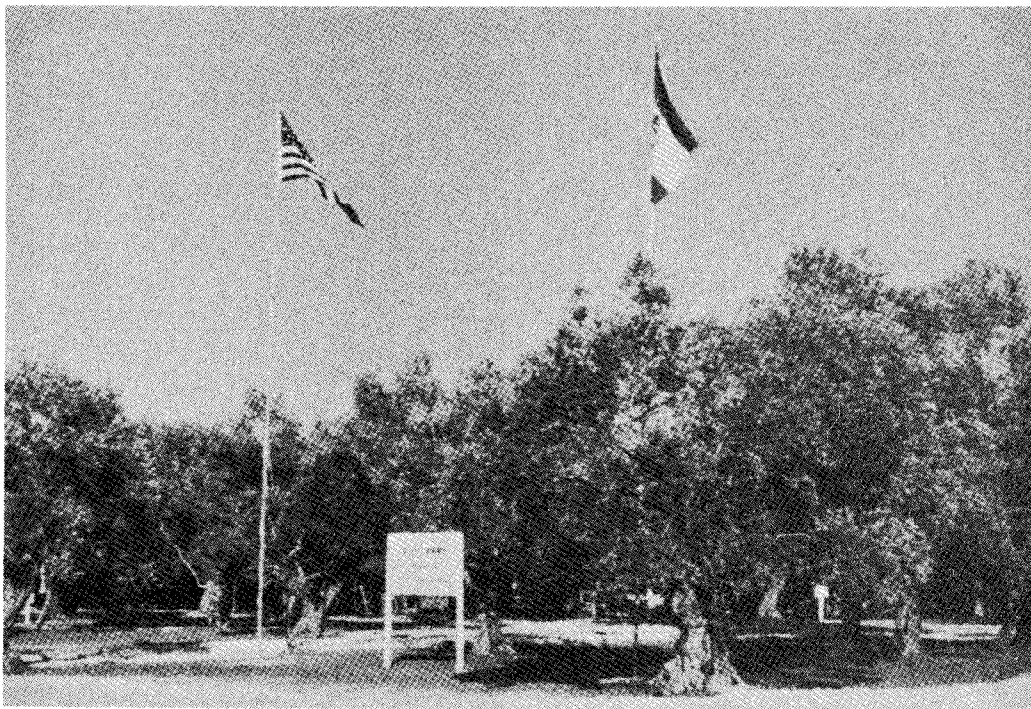
Colonel Meetze organized the logistical command staff to command, control, coordinate, and direct the administrative and logistical support operations performed by its subordinate units (figure 11). The commander had a deputy commander, a directorate staff, a technical staff, and the normal administrative staff to assist him in discharging his responsibilities. The directorate staff had six sections, each charged with distinct staff responsibility in one of the following areas: personnel, security, plans and operations, supply and services, procurement, and civil affairs. The special staff had the normal administrative and technical responsibilities associated with its titles. In addition, it exercised "operational control of service units of [its] respective services."¹⁴

The 1957-58 curriculum of the Command and General Staff College at Fort Leavenworth, Kansas, taught officers to organize a primary staff for the logistical command. Possibly because of the enlarged responsibility and span of control, the primary staff officers were designated as directors. These directors had the general functions of assisting and advising the commander and deputy commander; formulating policies, plans, and directives; and coordinating and supervising the execution and implementation of plans by subordinate commanders.¹⁵ Interestingly, the 1959 Field Manual 54-1, The Logistical Command, contained an organization similar to the one used in Lebanon in 1958 that specified directors instead of a primary staff. Evidently, those Army officers responsible for teaching and writing at the Command and General Staff College and those in field operations did communicate with each other. The result was a field manual based, in part, on practical experience.

The actual staff organization, however, did not match any pre-1959 field manual. It did follow a basic doctrinal tenet--that the organization should be flexible to support the operational mission. The former deputy commander of the 201st Logistical Command, Col. Dan K. Dukes, commented that "the entire organization and operation was a series and conglomeration of changes to the extent that if there was an original it could hardly be recognized."¹⁶ This statement can be taken either as a positive reflection of a flexible doctrine or as a reaction to an operational problem without regard to



201st Logistical Command flag



Photos courtesy of Brig. Gen. Adam W. Meetze (U.S. Army, Retired)

Headquarters, 201st Logistical Command, Beirut, Lebanon, 1958

doctrine. In sum, it appears that existing field manuals did not greatly influence the organizational process.

A major change during the operation was the addition of an Adana, Turkey, support group, adding even greater numbers to an already large support force. Requirements to handle the supply storage and issue at Adana Air Base justified creation of the group because there was no permanent organization to manage a de facto pre-positioned storage site.

A primary purpose for the creation of the 201st Logistical Command was to have a single point of contact for all logistical matters. It succeeded in that purpose. The absence of combat contributed to the size and showmanship of the logistical effort. The G4/S4 of the airborne brigade and AMLANFOR headquarters, lacking serious operational planning duties, became more involved in the daily logistical operations by requesting data for briefing charts. The creation of AMLANFOR headquarters had a minimal effect on logistical operations except to add one more person to the briefings and statistical distribution lists. Coordination between the staffs was not a problem because sufficient time existed to accomplish this coordination through meetings and unhurried conversations.

The 201st Logistical Command experienced a few problems in its internal operation. Colonel Meetze's greatest difficulty was melding the command's approximately fifty separate military units and teams into a close, cohesive, functioning command. His task was all the more demanding because none of these units or teams had ever served, worked, or trained together as a team.¹⁷ His deputy, Colonel Dukes, added this important postscript to the operation: "By the time Lebanon was all over, this conglomeration was just beginning to be sorted out and identified and able to function. . . ."18

Critics have charged that this command was too large. However, if the planned numbers of combat troops had actually been deployed to Lebanon for combat operations, a logistical organization of this magnitude would have been necessary to support the combat troops. Because there were no combat operations, the command appeared, in retrospect, to have been too large for the forces it supported. But it would have been foolhardy to plan a deployment without considering the risks and logistical requirements of combat. The support force turned its efforts from basic resupply to making life comfortable for the task force--better for the troops to be blessed with abundance than to suffer deprivation because of unforeseen circumstances.

The major difference between adequate plans and actual operations lay in the teamwork and practical operational procedures that naturally develop in realistic training exercises. The 201st Logistical Command was well planned and did provide one point of contact for all logistical operations. It was not, however, a smooth-running command until several months after deployment. It sufficed in Lebanon in 1958, but, to sustain a wartime deployment, combat service support elements need realistic training and exercises in peacetime. Such training instills teamwork and assures adequate, timely materiel support. Just as infantry units train as a team to assure battlefield success, so must support elements train together to ensure that battlefield success can be sustained.

Resupply

In Lebanon we unloaded mountains of supplies and equipment even after it was known there was no enemy; no fighting. This created problems and lost flexibility, gained nothing, indeed created a liability that could have caused great trouble and loss of life.¹⁹

Logistical doctrine requiring that X-days of supply* be on hand at any given time was the reason these "mountains" of supplies were delivered. They had been preordered and were automatically shipped in bulk to Lebanon from both USAREUR and CONUS.

Planning

Three factors governed logistical support planning for ATF 201: the requirement to deploy two battle groups, the necessity for rapid deployment, and the availability of aircraft. Annex D of EP 201 divided the logistical responsibilities, stipulating that USAREUR would be responsible for all logistical support of ATF 201 until either E+30 days or E+45 days if STRAC deployed, at which time DA would assume the task. USAREUR would furnish Alfa

*A day of supply was a unit used in estimating the average expenditure of various items of supply, usually expressed in pounds per man per day and in quantities of specific items.

and Bravo forces with the minimum basic supplies required to maintain combat operations until routine stateside resupply was established. Directly behind the deployed forces, airlift would carry the initial resupply and arrive in the staging area about E+3 days. This resupply would establish an initial level of about ten days' supply of class I and five days of class III, with additional air resupply ultimately increasing levels to about fifteen days of class I and ten days of class III. After setting these initial priorities, the plan stated that, in order to reduce the airlift requirements and increase troop deployment rates, all logistics would be on an extremely austere basis. Air logistical support was to be the minimum necessary to sustain operations and any unforeseen contingencies.

Normal supply buildup as dictated by the contemporary doctrine and overall logistical support would begin with arrival of sea resupply from both the USAREUR COMMZ and CONUS. USAREUR COMMZ would ship the initial resupply for the entire ATF, which would arrive at Iskenderun, Turkey, around E+20 days. This convoy would contain twenty days of all classes of supply. If required, emergency sea resupply from SETAF, then stationed in Italy, would arrive at about E+10 days and increase the buildup to twenty-five days of class I and twenty days of class III. EP 201 further charged SETAF to send an additional three basic loads of class V by E+10 days. Classes II and IV would be provided at the minimum to sustain operations; planners considered rationing class III in the early stages a distinct possibility.

The plan also directed USAREUR to support Charlie Force initially. If Charlie Force deployed by air, USAREUR was to provide enough supplies to sustain the force until arrival of sea resupply, about E+20 days. Delta and Echo forces deploying by sea would carry accompanying resupply in their transports to sustain them for about twenty days.

DA would ship an additional twenty days of all classes of supply to arrive at Beirut around E+30 days.²⁰ Those shipments from stateside would raise available supply levels from ten to thirty days. In addition, CONUS depots would continue automatic resupply with convoys, which contained supply for twenty days, arriving at twenty-day intervals in order to maintain a supply level of thirty days. The Army restricted the CONUS convoys to classes I, III, and V, with only limited quantities of classes II and IV and repair parts. Routine resupply would be operational after E+6 months.

Execution

On implementation of the plan, supply operators crated supplies stored in USAREUR. As noted earlier, supplies were not earmarked in Europe, so, although these supply workers found the supplies, the loading was haphazard. They loaded the first two scheduled COMMZ shipments (twenty days of resupply) on time and sealifted them from Saint-Nazaire and La Pallice to Beirut and to Iskenderun for transshipment to Adana, Turkey.²¹

Colonel Meetze later recalled that all went well until

the arrival of the COMMZ first sea resupply shipment; identity of stocks as to shipment was lost. . . . This required many days to inventory and completely smothered the Quartermaster in receiving and documenting Class I supplies. I remember well the gracious gesture by General Gray, ATF 201, in loaning us a few men who worked around the clock with the Logistical Command personnel to make some semblance of order from piles of jumbled stocks.²²

As noted in chapter 1, stateside resupply had already begun. In fact, because of a readiness exercise in June 1958, a month before the Lebanese crisis, most of increment one had already reached the U.S. ports. Following EP 201, DCSLOG released increment two for shipment to the ports and issued orders for depots to pick, pack, and hold increment three supplies. The total CONUS resupply was originally to consist of eleven increments, but developments in Lebanon soon made such massive resupply unnecessary, and only increment one was completely shipped. These supplies, a total of approximately 13,000 measurement tons, were loaded aboard three vessels at New York, Sunny Point, and Charleston. The vessels departed on 8 August. Because of lower than expected consumption rates, the troops in Lebanon did not require the class III and V supplies of increment two. Only the class I portion of this increment finally went forward. At New York, 900 measurement tons were loaded aboard Dalton Victory. Then, before the ship departed for Beirut on 25 August, it was further loaded at Hampton Roads with 1,100 measurement tons for the Marine Corps.²³

The sealift cargoes arrived on time. However, because of the absence of hostilities and because resupply rates were based on wartime consumption, a huge surplus of supplies accumulated. It soon became clear that the theater could directly handle the reduced requirements of the Army forces in Lebanon. On 19 August, USAREUR indicated that it was prepared to assume complete resupply

responsibility after the second CONUS shipment, the portion of increment two that left the port on 25 August. Consequently, no further EP 201 resupply shipments were made from the United States.²⁴

The readiness exercise that had begun on 17 June enabled supplies to arrive as scheduled because most of increment one was already at the port ready for loading by E-day, 15 July 1958. This might have caused the stateside resupply to arrive too soon, but that was not the case. It took until 8 August to load the vessels fully, and these ships arrived in Beirut approximately fourteen days later, or a total of thirty-eight days after E-day, eight days longer than the planning figure. Starting from the time the readiness exercise began in June--and assuming the exercise was a full-scale effort--it took sixty-seven days for the resupply shipment to arrive in Beirut--thirty-seven days over the planning figure! Thus, under the worst possible circumstances, ATF 201 would have had to rely on an emergency resupply effort for twenty-seven days, an unenviable position to be in. In short, if resupply had started from scratch, the logistical plan would not have been sufficient. Even under the artificially favorable circumstances of a readiness exercise, execution took eight days longer than planned. Obviously, the national supply system did not respond as fast as planners had envisioned.

The switch from CONUS to theater resupply was the first significant deviation from EP 201. Essentially, it was made to simplify the resupply effort and to turn off the stateside tap. According to Colonel Meetze, "Since only one battle group had been committed to Lebanon, and our situation did not reflect true combat conditions, our expenditure rates were found to be less for all classes of supply and timely action was necessary to reduce or divert automatic resupply to preclude large stock piles in the Beirut area."²⁵ The cancellation of the next nine and one-half increments from CONUS eased the stockpile situation in Lebanon but did not resolve the problem completely. Doctrine called for a specified amount of supplies to be available to deployed troops, so stockpiling was inevitable in an operational area.

Moreover, operational problems could have been avoided. Security considerations caused one difficulty. Another was the old curse of incomplete loading plans and cargo manifests. It was also apparent that the supply operators did not understand what constituted a basic day of supply. As the AMLANFOR after-action report made clear:

The effectiveness of the Logistical Command in supply control function was hampered by the lack

of preparation of elements of the command for the operation. The supply personnel of the command did not know what items, in what amounts should be available for a day of supply for ATF 201 nor did they know the basis on which automatic supply was sent to the command from COMZ. The personnel of these teams by and large came from sources which depend on centralized supply control. They were not informed in advance of their role in EP 201 for security reasons, therefore, they did not have the official publication to compute days of supply at combat rates or to reconcile any rates they knew about with the quantities received in the automatic resupply shipment.²⁶

Entire cargoes, most without manifests, were unloaded, inventoried, and temporarily stored, which caused further delay in the distribution and final storage of supplies. The delay was not critical (although it might have been disastrous had hostilities occurred). The most difficult cargoes were bulk loads. On 7 August, for example, one bulk load of forty commercial vans of class I supplies reached the quartermaster supply point at Beirut. These vans contained mixed loads of different types of rations (five-in-one, B, and C). The conditions of the loads and quantities of trucks made selective off-loading impossible. Soldiers unloaded the trucks' cargo in big piles. Hundreds of cases and domestic packs were broken, and loose items were scattered around the trucks. Shipside unloading caused most of the damage. Besides the immediate losses, it took time to organize all the loose items, inspect the damaged packages, and then properly distribute the rations to the field.²⁷

Repair parts also arrived, for the most part, in bulk. In addition to confusion caused by incomplete manifests and bulk loads, the engineers, ordnance, and quartermaster personnel lacked technical manuals to identify properly these repair parts. These specialists were so busy trying to find what was available that, when a demand for a part arose, if they could even find it, they issued the part without proper accounting procedures. In fact, they never did develop the necessary supply planning.²⁸

Once supply planners determined the days of supply,* reducing levels from thirty days to fifteen,²⁹ the

*In mid-September, the status of days of supply computation began to be based on the actual troop strength in Beirut.

COMAMLANFOR approved a plan that allowed for the selective discharge of cargo,³⁰ or taking only necessary items out of the ships and leaving the remaining cargo aboard. In that process, inaccurate or missing manifests made the task even more difficult. "[Because of] the lack of proper manifesting of vessels and because selective discharge was not contemplated at point of origin many items had to be off-loaded then back-loaded after required items [were] discharged."³¹ This was a process not unlike unloading a full automobile trunk to get to a jack and then reloading the trunk.

Other unforeseen factors influenced the amount of materiel on hand, such as the local availability of petroleum products. Logistical planners, however, were unaware of this because the intelligence officers evidently did not route their estimates through the logisticians. With the amounts of materiel and petroleum products far in excess of that needed already in the resupply pipeline, more than selective discharge had to be done to avoid further port congestion. Staff officers had to divert supplies to Europe or to the Adana subcommand.

The importance of the base at Adana became readily apparent when the operational area, Beirut, began to bulge at the seams. Adana was therefore established as a prestockage point for the operation. "The mission of the subcommand as received from the 201st Logistical Command was to receive cargo from the port of Iskenderun, transport it to Incirlik Air Base, and establish a depot storage area for, at that time, approximately 15,000 tons of all classes of cargo."³² Adana would maintain ten days of classes I, III, and IV and twenty days of classes II and V so the originally planned stockage would be available in the same part of the world.³³ As with supplies arriving in Beirut, Adana had problems with supply planning, particularly the acquisition of adequate storage areas, because of "a lack of firm information relative to the quantity and type of supplies to be received at Adana."³⁴ Confused procedures for diverting incoming ships to Adana caused added complications. AMLANFOR headquarters reported that "actions to accomplish adjustment in resupply were complicated by the need to make requests for diversions of CONUS shipments through several agencies, such as Department of the Army, the Overseas Supply Agency, N.Y., USACOMZEUR and CINCUSAREUR."³⁵

Despite the problems, supply bundles accumulated in Beirut and Adana in sufficient numbers to meet the required days of supplies. (See appendix D for examples of on-hand supplies.) Except for class I (rations), the supplies generally remained in storage areas. Critics of the operation strongly recommended that a centralized on-call

supply system would have been more efficient than automatic resupply. Although the automatic resupply satisfactorily met supply needs, a more efficient system for making a transition to an on-call resupply arrangement was needed for contingency operations.³⁶ With the noncombat situation in Beirut, the supply operators found it difficult to stop the incoming materiel because of the inflexibility of the automatic resupply system. As an after-action report stated: "Some energetic thought must be given to ways of adopting logistical support for STRAC type forces by providing fast dependable transportation and smaller increments of balance resupply rather than the 15 to 30 day ones used for this operation."³⁷

The transportation of these supplies from the storage points to units did not present a problem once transportation companies arrived about two weeks into the operation. Until that time, combat troops used their own transportation. The static situation allowed the logistical command to consolidate all transportation operations under the 38th Transportation Battalion.³⁸ That battalion had adequate time to organize for its mission because it did not have to support a fast-moving, fluid situation requiring immediate attention. One might speculate on whether this battalion could have handled combat resupply, but, given the assets shown in the organization chart (figure 11), the transportation battalion would have done the job once ashore. If combat units had lacked organic truck transportation, there might have been problems because the majority of the transportation assets arrived too late in the operation to be of any use. In case of armed opposition after landing, the combat troops would have required the transportation battalion earlier, and it probably should have had a higher landing priority regardless. As the operation slowly unfolded, transportation was adequate. The central problem remained the unraveling of resupplies on the ground.

Colonel Dukes, in charge of supervising the resupply operation, recommended: "Where possible, and Lebanon is a good example, a water borne base should be used, facilitating a very gradual build-up on land only as conditions warranted and required it. I refer to a stream concept, vis-a-vis, the old line of so many days of supply ASAP and on the ground in the forward position."³⁹ Dukes makes a good argument for just-in-time logistics, water-borne, prestockage points, and a push-pull system of prepackaged bundles of resupply.

In Lebanon, the doctrine of maintaining X-days of supply on the ground was inefficient. Doctrine caused the diversion of combat troops from other duties to help unload

unnecessary or redundant supplies. The resulting stockpiles offered a lucrative target and encouraged waste; for example, sixteen tons of Marine and ten tons of Army ammunition were dumped at sea due to damage in storage.⁴⁰

Procurement

Under normal combat conditions, indigenous facilities, services and supplies would be obtained by seizure; however, in the Lebanon situation this was not practicable because of JCS directives relating to minimum interference with normal activities of the host nation.⁴¹

As the U.S. armed intervention in Lebanon lengthened, a predicament developed. Instead of a fast-moving assault operation, a large U.S. peacekeeping force staged a show of force in cooperation with the local government. Furthermore, the situation did not require the task force to live under combat conditions for extended periods. As a result, consumption of combat supplies remained below anticipated levels (although such supplies remained plentiful because of the automatic resupply system), while demand for other services soared. Normally, assault troops would have seized these other services, facilities, and supplies during the course of combat operations, but, since ATF 201 was cooperating closely with the Lebanese government, confiscation could not be considered. Instead, the U.S. government had to arrange for and buy supplies and services to maintain the image as an invited guest. Thus, an additional, unplanned procurement burden arose when obtaining supplies earmarked for troop welfare and adequate headquarters facilities. Specifically, the Army does not content itself to live on C-rations for months when other options exist. Even though piles of combat supplies were available, the task force undertook a large local procurement operation without adequate planning.

In the 201st Logistical Command, EP 201 established a procurement staff section of two officers and two enlisted men, plus a one-man procurement policy office in the Directorate of Supplies and Services to coordinate procurement policies.⁴² One officer of this procurement section arrived in Beirut on 20 July. He had no supplies or equipment of any kind. Thus, no procurement forms, regulations, or other directives were available. He did not know what fiscal appropriations existed, and, of course, no fiscal officer was available to provide fund certification.⁴³ The primary cause of his predicament was operational security. The director of procurement for

the 201st Logistical Command said later: "Guarding of the details, meaning, and objective of the plan must naturally be effected. However, in the recent operation, security was exercised to the point that the great majority of participants in key positions were not informed."⁴⁴ Conceivably, he could have been referring to this particular officer or himself, or both.

The procurement officer, immediately on arrival, was verbally appointed as a contracting officer by Colonel Meetze, who instructed him to obtain locally those items needed to support the AMLANFOR ashore.⁴⁵ Items procured included:

- Quartermaster--paper, pencils, stencils, and other expendable supplies; fresh fruits and vegetables for troop messes; coffee, brooms, maps, soaps, ice, and embalming service.

- Engineer--lumber, nails, plywood, hinges, crushed rock, paint, D-4 dozer parts, and use of bucket crane with operator.

- Medical--items required for use by the field hospital in patient treatment, laboratory services performed by the U.S. hospital in Beirut, and drugs.

- Transportation--stevedoring, bus transportation, and rail and truck transportation.

- Miscellaneous--minor signal, ordnance, and chemical items.⁴⁶

How one man without supporting materiel was supposed to accomplish this task was not clear. Only the assistance of the U.S. embassy made the officer's job possible. The procurement officer immediately used the embassy to help contact Lebanese vendors. On 22 July, the embassy set up a liaison procurement section to contact and receive applications from local vendors and to deal with specified sources of supply. The embassy provided interpreters who overcame the formidable language barrier, and the system worked. The contracting officer made his needs known to the embassy. A liaison officer would then contact a local merchant and conclude a verbal agreement on price, quantity, and delivery. Verbal agreements were necessary because of the urgency of the demand and due to the lack of requisition forms and procurement personnel. The embassy provided limited typing assistance for ten or twelve purchase orders but could not cite funds because the appropriation data was unknown. The U.S. government found itself obligated, in most instances, by verbal contract, even to include requisition of real estate and

property for use by the task force personnel.⁴⁷ To pay for these items, the logistical command received \$25,000 on 18 July and an additional \$100,000 on 1 August from USAREUR.⁴⁸

Evidently, the planners forgot to make provision for real estate procurement because no provision had been made to establish a real estate office. It was expected that these duties would be performed in the engineer staff section of Headquarters, 201st Logistical Command.⁴⁹ Moreover, real estate transactions were a significant problem because "no one with procurement experience in the real estate field was included in any of the troop complements."⁵⁰ The volatile political situation required quick action to find billets for the combat troops. This forced the contracting officer into verbal agreements with local landowners. Luckily, no major mistakes were made.

Water, which is of prime importance for military operations, particularly in the Middle East, was another immediate need. Each man had a five-gallon supply of water on the initial lift. Planners supposed that potable water could be obtained locally. Even with the cooperation of the local authorities, however, considerable effort was needed to acquire adequate supplies for the U.S. troops. No lakes or springs were in the area of operations, and the streams were bone dry. The city distribution system had branch lines that skirted most of the bivouac areas. However, Lebanese authorities rationed this supply, and peak demands for military use would have overtaxed the antiquated system. Also, rebels had sabotaged three distribution mains and associated branch lines. Consequently, wells were the only reliable source of water. Although the wells were numerous, access to them was poor and most had a small yield. Furthermore, while most well owners agreed to sell water to the U.S. Army, they insisted on reserving the right to use their well for six to eight hours each day for irrigation. Only a few wells produced a reliable yield on a twenty-four hour basis. Eventually, one well supplied 75 percent of the water for the command. The average consumption reached about nine gallons per capita per day for all purposes, including laundry service, showers, and road sprinkling. Civilian contractors offered to drill wells for the Army, but no contracts were let.⁵¹

The organization of the 201st included well-digging teams, but the need to procure land and the availability of other wells probably precluded activation of these teams. In a secured area, these teams could have eventually provided necessary water. But in a fighting situation, the unexpected difficulty in obtaining water

might have caused serious problems. Greater attention should have been given to the procurement of water; merely assigning well-digging teams to the force was not sufficient.

Other procurement shortages included shop, warehouse, and refrigeration storage, which became acute when the operation turned into a peacekeeping mission in conjunction with the automatic resupply procedures. In addition, the need to conduct fair and legal rental agreements contributed greatly to the lack of warehouse space.

The 201st Logistical Command found itself unprepared for the large procurement demands it faced as there was no procurement annex in the plans. The procurement officer recommended that, in the future, "such an annex should include instruction on the proper method of submission of purchase requests, funding requirements, procurement procedures (to include time required to effect procurement), and a listing of items which by law may not be procured under any circumstances and/or unless certain conditions exist."⁵²

Even without planning, the procurement activities did succeed, largely because of the presence of the U.S. embassy. Moreover, enough time was available to rectify the procurement effort, and the established procurement office in theater (USAREUR) responded readily to requests for funds to compensate for local procurement activities in Beirut.

Civil Affairs

". . . establish a base in the large olive grove just east of the airport . . . matter of military necessity. Send the bills to the Ambassador."⁵³ These few lines created yet another difficulty. "One of the most serious problems involving the civil affairs staff," according to Colonel Meetze, "was the harvesting of the Olive crop."⁵⁴

The decision to laager ATF 201 in the olive grove southwest of Beirut was probably made on the basis of both space requirements and the tactical situation as then known by the commander. The decision, however, did not consider civil affairs implications. U.S. forces eventually occupied 20 percent of the largest olive grove in Lebanon. This one grove produced an annual revenue of around \$100,000 that was vital to the local economy. To further complicate the problem, some 200 different people owned the trees. With proper troop discipline, the trees

would not be damaged, for the groves contained existing roads and open spaces for tents. The tactical situation was static, so, with the approach of harvest time (September through February), pickers could have been allowed in the area with the proper security measures. However, the Lebanese women, the traditional olive harvesters, refused to enter the groves while U.S. troops were present. This impasse could have caused the loss of the crop and created a serious unemployment problem.⁵⁵ A simple, seemingly logical decision had turned into a social as well as an economic problem. The United States might have been stuck with a substantial bill.

Many Americans and Lebanese spent long hours finding a solution. Eventually, the U.S. Army, embassy, and local Lebanese mayors reached agreement. A joint team made an initial estimate of the olive crop's value and agreed to a final assessment upon departure. The team encouraged owners to harvest their crops because only if the owner made a reasonable effort to harvest his crop would a claim for damages be considered. For security purposes, the U.S. Army issued passes to harvesters whose names appeared on lists submitted by local mayors. Landowners did make claims, but, more important, it took many meetings, much time, formation of ad hoc committees, and extensive staff work by the U.S. embassy and civil affairs section to correct a serious problem created by a simple tactical decision (table 4).⁵⁶

Table 4. Summary of Claims Paid

<u>Claims</u>	<u>Monetary Amount</u>	
	<u>Lebanese Pounds</u>	<u>U.S. Dollars</u>
Olive Grove (crop, tree, and soil claims)	702,036.00	222,868.57
Real Property	360,428.00	114,421.58
Vehicle Damage	<u>7,015.00</u>	<u>2,226.98</u>
Total	1,069,479.00	339,517.13

(Based on a 1958 conversion rate of 3.15 Lebanese pounds to 1 U.S. dollar.)

Source: 201st LC, "Report," 13 October 1958 to 30 November 1958, 6.

For contingency operations in support of friendly nations, civil affairs activities are obviously important. Tactical planners, however, tend to ignore civil affairs, believing it is one of those things that others will take care of. The logistician must pay particular attention to civil affairs, for his activities are directly affected by the availability of local real estate, labor, supply, transportation, and the need for security. Generally, logistical commands have had a civil affairs staff because civil affairs was considered a service. As such, civil affairs needs to be preplanned.

Civil affairs planning for the operation, at best, was limited and, at worst, nonexistent prior to deployment. The civil affairs annex to CINCSPECOMME OPLAN 215-58 was dated 11 September 1958, nearly two months after U.S. Army forces had landed and civil-military relations had become a problem.⁵⁷ The civil affairs annex for CINCAMBRITFOR OPLAN 1-58 (Bluebat) did delegate authority, fix responsibility, and establish certain detailed functional policies for administration of civil affairs. Overall political direction was to be issued in supplemental political directives by the concerned governments. USAREUR EP 201 of 18 February 1958 called for supplementing the headquarters of the logistical command with three civil affairs teams (headquarters, language, and labor teams), thus creating a civil affairs staff of five officers and eleven enlisted men.⁵⁸ A recurring comment in after-action reports about these plans was that commanders did not receive adequate policy guidance from higher headquarters.⁵⁹ The reason planning is difficult for contingency operations is that actual employment locations may not be identified and that the conditions of employment cannot be determined in advance.

Still, it is possible to design in advance an organizational structure to handle such problems. Regardless of the situation, qualified personnel can be trained, and the headquarters level of responsibility can be determined in advance. For the Lebanese operation, there was no predetermined responsibility; instead, it had to evolve. To ensure consistency with official U.S. government guidance, the American ambassador was responsible for all public relations activities regarding U.S. military operations in Lebanon. CINCSPECOMME (with the J3 as supervisor) was responsible for developing civil affairs agreements with the Lebanese government, a status of forces agreement, and liaison with the U.S. embassy on all matters relating to military policy consideration. On the other hand, the J4 for the COMAMLANFOR established and conducted civil affairs within the area of ground operations.⁶⁰

The civil affairs staff designated in EP 201 for the logistical command began arriving in Lebanon on 20 July. For reasons not clear, "none of these teams were used as such and all except two officers and two enlisted men were reassigned to other than Civil Affairs duties." These two officers and two enlisted men formed the Directorate of Civil Affairs for the 201st Logistical Command, and even they had the additional duty of special service activities.⁶¹

It is doubtful that the four-man team could have handled a situation similar to the one in Lebanon if it had deployed to a nation that had no diplomatic ties with the United States. Through the U.S. embassy liaison office in Beirut, the State Department negotiated with the Lebanese government about contracts between U.S. forces and Lebanese civilians. "This [diplomatic] office proved extremely valuable to the military and assisted greatly in the accomplishment of the [military] mission."⁶² A Lebanese-American Civil Affairs Committee (eventually elevated to "commission" status) was established by U.S. embassy and Lebanese officials to set policy, carry out coordination, and monitor indigenous resources. "The committee met weekly and its activities were instrumental in avoiding unnecessary adverse publicity and lengthy negotiations."⁶³ This committee worked with the civil affairs office and helped to identify such operational problems as violations of public security, claims, use of public domain, use of indigenous labor, community relations, procurement, and monitoring of local resources. The committee also developed data about the Lebanese government, population densities, political aspects of interest to the U.S. forces, and other information relating to military and governmental activities and plans.⁶⁴

The civil affairs staff considered a variety of everyday socioeconomic activities. These included legal matters, such as the status of forces agreement and foreign claims, public safety, curfews, fire and sabotage prevention, and general disaster relief as well as police and military cooperation, control of vendors, labor and union liaison, public health, food and agriculture policies, property control, public transportation, civil information, and political affairs. The civil affairs office handled all of these activities a month after U.S. forces landed in Lebanon. The Americans developed policies as problems arose, and the ambassador or a State Department representative was available to set the policy. However, such may not always be the case.

After-action assessments deemed the civil affairs staff for the Lebanese operation inadequate. These reports

strongly recommended that civil affairs annexes include guidance for the military commander and the ambassador. These annexes must detail procedures so that the commander may effectively carry out the military and political policies of the United States. "This guidance must also provide for the contingency that U.S. diplomatic representatives may not be available in the national area in question."⁶⁵ The after-action reports asserted that the civil affairs mission was successful only because the ambassador diverted nine foreign service officers from the Foreign Service Institute, Arabic Studies Center, to the embassy liaison office.⁶⁶

Because U.S. forces were in Lebanon twenty-three days without a status of forces agreement, a legal officer qualified in international law was required to adjudicate claims and draft a status of forces agreement. Such an agreement was essential for defining the legal guidelines for U.S. military personnel in a host nation. Status of forces agreements normally include rights of criminal jurisdiction, freedom of U.S. military personnel from civil action, exemption of U.S. military forces from taxation, free entry into a sovereign nation without inspection, the right to implement appropriate security measures to protect U.S. forces, and freedom of movement by U.S. personnel. For a contingency operation, it obviously is difficult to prepare a status of forces agreement in advance. It is possible to prepare a draft agreement and execute it at a favorable moment, probably as close as possible to the time when a nation requests U.S. aid.⁶⁷ Therefore, civil affairs annexes must also have sufficient guidance (perhaps in the form of a model or draft outline) so that the commander can negotiate an agreement with the foreign governments if no U.S. diplomatic representatives are available.

The civil affairs officers in Lebanon understood that exact, detailed planning might not be possible in the future, but they raised several questions that tomorrow's planners must address:

1. Should claims be accepted from the foreign government when United States forces are present on an invitational basis? On a noninvitational basis?
2. Should payment of fees for services, use of public domain or facilities be entertained from the foreign government or its legal entities when forces are present on an invitational basis? On a noninvitational basis?

3. Should the United States consider the claims of the indigenous private citizen or should such claims be shifted to the foreign government?

4. Should the claims function rest with the military forces or with embassy officials? (In either case, staff augmentation will be required very early in the operation. If military, component commanders should be granted authority to appoint foreign claims commissions. This authority should be effective upon assumption of command.)

5. Is the use of private property and facilities limited to normal contract, lease and purchase-type agreement, or mutually acceptable free use?⁶⁸

Finally, based on the Lebanese experience, civil affairs officers recommended that, when a foreign government invites U.S. troops to enter its nation, the sovereign government should make provisions for adequate bivouacs for troops. Because such laager space was not prearranged, the Lebanese government assumed that the U.S. forces would locate their own areas. This placed the U.S. commander in the embarrassing position of bargaining with individual Lebanese citizens who did not want to release their property to the Americans.⁶⁹ As a final comment, an after-action report warned that civil affairs succeeded only because, in the noncombat situation, commanders had time to devote to it and because the U.S. embassy provided excellent support.⁷⁰

Medical Support

. . . majority of fleet medical officers . . . ashore were gynecologists, psychiatrists, and obstetricians. . . .⁷¹

It is a long established fact . . . that any force deployed overseas requires the full range of medical support on a continuing basis, regardless of the combat situation, because diseases and injuries are normal to all military operations.⁷²

Medical support for U.S. personnel was left to the service commanders. CINCSPECOMME supervised, coordinated, and monitored supporting plans and operations of the service commanders, but CINCSPECOMME made each service responsible for providing medical support for its own

forces in accordance with existing interservice agreements. The plan did not provide or reference specific medical planning information for, most significantly, local area health problems, prevalent area diseases, and local sanitation conditions. All of these factors might have had a debilitating effect on the health of U.S. forces.⁷³

The Commander, U.S. Naval Forces, SPECOMME, was responsible for providing medical care for the amphibious troops while they were embarked with his command. The plan failed to specify which commander assumed this responsibility after the troops had landed. Surprisingly, at the CINCSPECOMME level, Army and Air Force medical personnel neither wrote nor reviewed the operational plan.⁷⁴

Based on CINCSPECOMME's plan, each component (the Army, Air Force, or Navy) developed its own respective medical support plans, with little apparent coordination. The Army, for instance, did not even receive a copy of either the Air Force or Navy medical plan. Each service worked in isolation "without reference to the over-all medical needs of the operation."⁷⁵ The Army medical representatives were unaware of the overall medical service responsibilities until the operation had begun. Army planners did not interpret SPECOMME's plan to mean the Army had responsibility to support the Marines ashore. As the operation progressed, the Army did provide clearing company and evacuation hospital support as well as certain supply and other services for all forces ashore. This action stretched Army resources thin because planners had anticipated only the demands of Army troops.⁷⁶

A lack of planning coordination forced each service to conduct an independent medical support program. There was no overall coordination or cooperation on supply operations, medical evacuation, or locations of medical support units. This oversight interrupted the flow of information concerning the medical organization within each service, proposed locations of field hospitals, and the extent of medical resources and support each service would provide.⁷⁷ For example, "while the Army and Navy were moving specially qualified personnel and units into the area, the Air Force was withdrawing personnel with these same skills. Supply shortages developed in one service necessitating extraordinary procurement action, while another service apparently had quantities of the needed items immediately available in the area."⁷⁸

The Army eventually had adequate organic medical support. Surgical facilities and operating rooms aboard

the SPECOMME commander's flagship were available, although only because of local coordination. When necessary, and not through planning, the American University Hospital in Beirut treated overflow cases. An evacuation hospital did not become operational until eight days after the alert, and resupply remained a serious problem.

Although medical supplies were adequate at first, the supply system did not respond readily to the medical needs that developed. "Medical resupply did not take into consideration specific items that were very 'fast moving' due to environmental conditions experienced."⁷⁹ Medics, however, used expedients, such as local procurement. The items in short supply were the common, but necessary, ones needed for treatment of diarrhea and heat exhaustion. Medical officers had difficulty requisitioning emergency medical items through the military supply system because medical supplies were integrated into the routine supply system along with all other items. Priorities already established within that supply system slowed responsiveness.⁸⁰ (In the 1950s, evidently to centralize the resupply system, medical items became part of the overall resupply system. Thus, a winch part could have had priority over a medical item. Medical resupply has since returned to medical channels.)

The medical supply system was also overburdened because, in April, USAREUR COMMZ ordered the Army to support all U.S. forces during an operation. The medical supply officer, however, did not learn of this added requirement until Delta Force, with the field hospital, had already arrived at the operational area in August. Then the logistical command informed the medical supply officer for the 58th Evacuation Hospital that he would issue medical supplies to all troop units within the task force and act as head of the force medical depot. This confusion and late notification resulted in a shortage of the medical supplies needed to perform the new added mission. Stocks of fast-moving items were depleted within a short time. While still in Germany, the medical supply officer tried to ascertain where medical supplies would be issued. Unable to do that, he assumed the Navy was in charge. As it turned out, the Navy did not have sufficient medical supplies available and even had to draw on Army stocks occasionally.⁸¹

Other problems abounded. The initial high security classification of the plans also affected the resupply effort. Even the twelve-man medical supply depot team "had no medical supplies nor information thereof"; the team never saw the classified plan and had no idea of what to do.⁸² Some supplies were outdated; for example, the

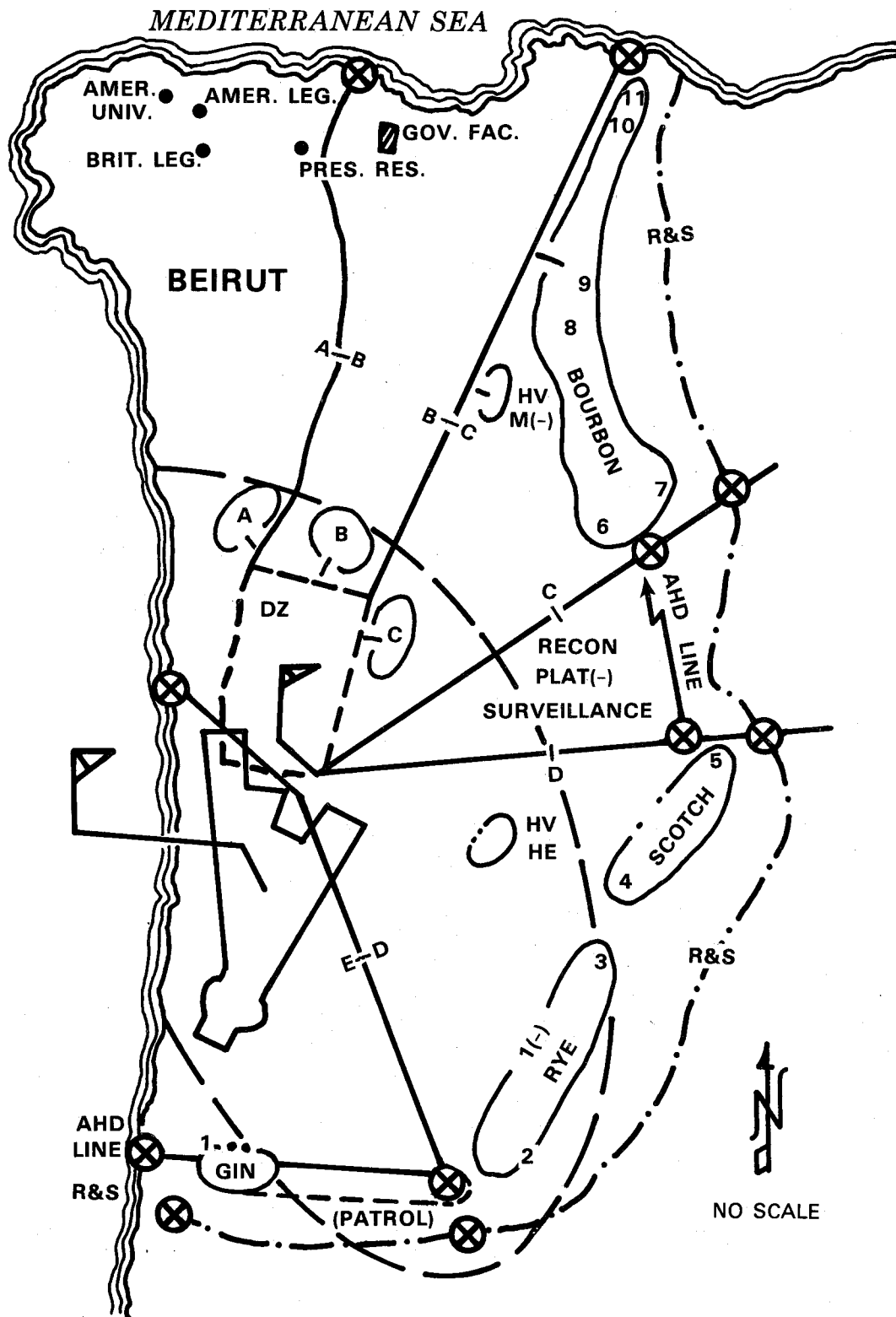
plaster paper used in casts was dated 9 March 1944. The medical personnel were carried in one ship and their equipment in another, with the resultant confusion and loss of equipment after landing that was characteristic of other task force elements. A majority of the medical officers involved in the operation believed that "if casualties (combat) had been encountered, it would no doubt have been a medical calamity and many saveable lives would have been lost" because of the lack of surgical facilities ashore during the initial stage.⁸³ This is a valid conclusion and again illustrates that the lack of prior coordination and the unclear division of responsibility might have proved fatal to the task force if it had met determined resistance.

Security

Plans for the operational security of the airhead were drawn up by General Gray's staff the day before the airborne force left Adana for Beirut. These plans seemed as if they had been "lifted from the diagram in the field manual for defense of an airhead."⁸⁴ (See map 3.) General Gray wrote later:

It would have disposed our troops in company-size strong points on the semicircular ridge of hills that rose to the south and east of the airport and the open sand dunes to the north with the ocean to the west. I believed that if we had trouble it would come from small forays or acts of individuals such as snipers, fanatics or thieves, and it would be better to initially, at least, dispose ourselves in a tight perimeter, largely in the olive grove east of the airport where we could protect ourselves by mutual support as well as provide a secure area for the support units that were to follow.⁸⁵

To counter the threat perceived by General Gray, the forces built defenses based on the current mobile defense doctrine that located troops so they could be quickly assembled at rendezvous areas. Without enough men to stop all small-scale infiltration, Gray's staff officers based their plans on the capability of the Lebanese army and civilian agencies to acquire the necessary intelligence for them to assemble the requisite forces to counter an attack. The forces finally deployed in positions inside the area indicated by the broken line on map 3 with three rifle companies occupying forward ready positions. Some platoons within each company developed tactical positions; however, the majority of each company remained in an administrative bivouac ready for rapid movement. The



Source: "Infantry Conference Report," Comments, 227.

Map 3. Security Plan

brigade commander detailed one company as an airfield guard and kept one company in reserve in the olive grove to provide security for brigade troops, the support command, and the line of communication to Beirut. There were sixteen rendezvous areas located throughout the sector where troops could quickly move in case of an emergency.⁸⁶

The airborne staff developed six contingency plans to handle these emergency situations:

- OPLAN Cover moved U.S. forces to block any entry of organized combat forces into Lebanon.

- OPLAN Extraction covered the withdrawal of U.S. troops when ordered.

- OPLAN Deep Freeze provided for winter dispositions in the event the U.S. occupation was prolonged.

- OPLAN Rescue implemented the rescue of key U.S. and Lebanese officials and family members from their offices or residences.

- OPLAN Shoforce called for the movement of tactical units in and around Beirut to impress continually on the



Brig. Gen. David W. Gray inspecting a guard post

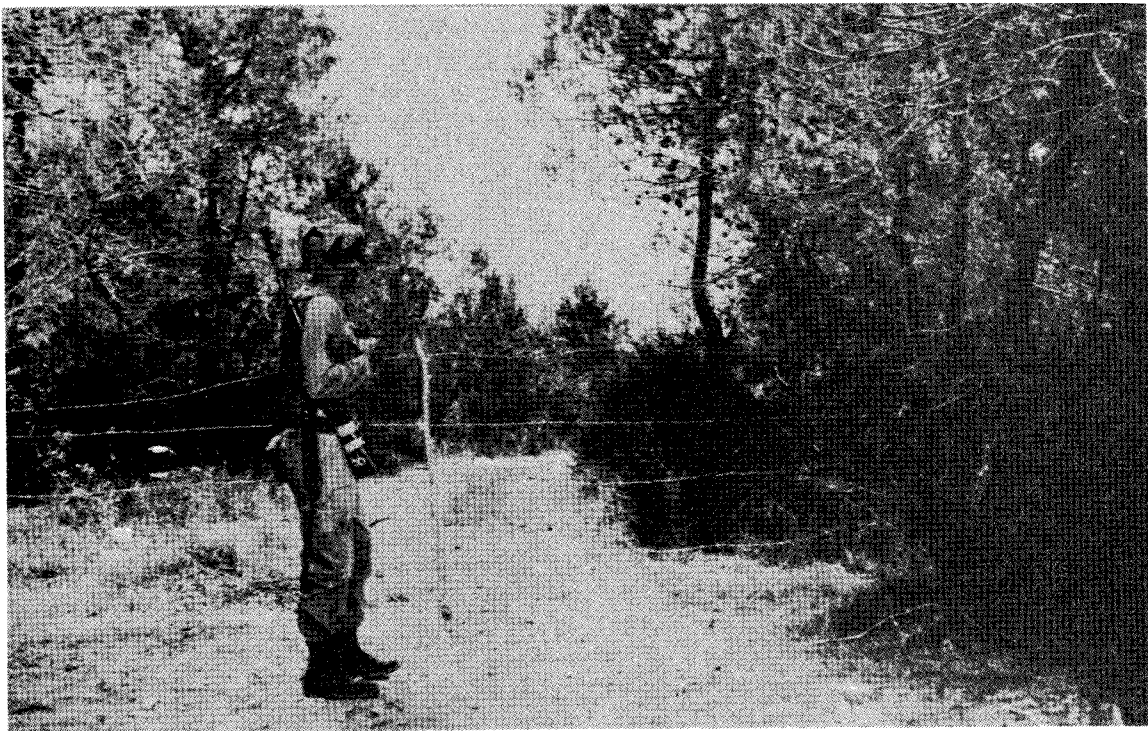
dissident elements the U.S. presence and readiness to intervene.

• OPLAN Cyclone called for tank-infantry teams to move quickly to any locality in the city of Beirut to reduce roadblocks or establish tactical positions.⁸⁷ "These cyclone forces were used on quite a few occasions and were very effective in quieting the situation down, as neither side wished to get us involved. They were also effective in keeping our troops on their toes and thus assisted in the maintenance of high morale."⁸⁸

The airborne force expected to conduct security operations and apparently had little difficulty in doing so. However, the logistical command was less flexible. After-action reports discussed the perennial conflict within technical units between operational effectiveness and physical security. As with many modern-day support units, ordnance, quartermaster, medical, transportation, and other units claimed that their operational effectiveness declined when they had to provide guard details. The ordnance units claimed a loss of 60 percent effectiveness due to guard requirements.⁸⁹ The support units probably assumed, as they do today, that "someone" would provide security so that mechanics could be mechanics, supply people could perform supply functions, ammunition handlers could care for ammunition, and so forth. The plans for the Lebanese operation, however, assumed that each support unit would protect itself and did not specify a separate security force to guard the bulging supply stocks that filled the area because of the automatic requisition system.

The logistical plan did provide for a Directorate of Security that was charged with typical security duties, including communications, plans, intelligence, and counterintelligence. On arrival in Beirut, though, this directorate discovered that it was unprepared for such duties: when those assigned to the directorate opened their sealed classified folders of maps and intelligence studies, they found the material was revelant only to Turkey.⁹⁰

Initially, then, the Directorate of Security lacked information and current intelligence. Later, physical security for the mountains of supplies bedeviled this security office. Other security matters rested with the AMLANFOR headquarters and the airborne brigade. The director of security established liaison with the G2 of ATF 201, the Lebanese port security officer, the Lebanese railway maintenance officer to U.S. forces, and the Beirut



U.S. Army guard post in Lebanon

municipal police chief. The director of security insisted that tactical troops of the 187th Airborne Group perform guard duty. However, in a 12 September 1958 memorandum for record, General Adams told the logistical command that the supply personnel were responsible for the security of storage areas and that every unit was subject to the guard rosters. A 201st Logistical Command report stated that the major security problem since the arrival of technical service supplies and equipment was finding guard personnel. Because the logistical command had no organic guard unit, the technical service troops worked at their normal duties during daytime and stood guard duty at night. Numerous guards were needed to prevent pilferage or sabotage of supplies during unloading at the port area and airfield and during truck or rail transport to storage areas. Also, many guard posts were required to protect the open storage areas. The technical service personnel already had a heavy work load just to sustain the resupply effort. They worked abnormally long hours under primitive conditions, and their performance of both duties naturally suffered. These factors physically exhausted them to the point that their efficiency as guards was questionable.⁹¹

General Meetze later gave an example of the problem in his description of one pilferage incident:

Petty pilferage of Class I stocks in the olive grove at night by native Lebanese was always a problem. I remember quite well a security incident involving the Quartermaster Depot area in the olive grove. Trees were spaced roughly 10-20 feet apart and not an olive tree could be removed without the personal authority of commanders of AMLANFOR's subordinate elements. The QM Depot area in the olive grove was protected by six sections of concertina wire which encircled the entire storage area. Three sections were placed together . . . and separated by a path the width of a jeep which made periodic circles of the area at night. There were no lights in the area. One morning, the company commander of the provisional quartermaster company informed me that a circus tent, folded in sections, had been stolen the night before. How anyone, or even many persons, could get these huge pieces of canvas across six sections of concertina wire without arousing the sentry on duty or being observed by the jeep driver will never be known. . . .92

Nonetheless, whether they liked it or not, the service units had to provide their own security. This probably was fair, for combat units had specific missions and should not have been tied down on guard duty. To avoid unnecessary reduction in the efficiency of technical service units, planning must consider rear area security. Reserve brigades may be able to fulfill the large rear area security mission, but serious thought should be given to troop lists and service unit strength so that these units have adequate security and are capable of performing their mission.

